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10/658,727	09/09/2003	Jeyhan Karaoguz	14168US02	2798

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EXAMINER
PARK, JUNG H

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _17 September 2009_.
2a) ☐ This action is **FINAL.**   2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
   closed in accordance with the practice under _Ex parte Quayle_, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-31_ is/are pending in the application.
   4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) _1-31_ is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a) ☐ All b) ☐ Some * c) ☐ None of:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. _____.
    3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
       application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Remark

1.   This communication is considered fully responsive to the amendment filed on 09/17/09.

      a. No claims have been changed.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United
States before the invention thereof by the applicant for patent, or on an international application by another
who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the
invention thereof by the applicant for patent.

3.   Claims 1, 10, 11, 20, and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by

Lee et al. (US 2004/0039817, "Lee").

      Regarding claim 1, Lee discloses a method for providing communication in a

multi-band multi-protocol hybrid wired/wireless network, the method comprising:

  - determining a protocol (selecting one of 802.11 family protocols, see 110-114 fig.1

and ¶.29) associated with a communication signal for an access point (AP) (signal

associated with AP, see ¶.29);

  - allocating a processor within the access point (inherently allocating/assigning a

processor within the selected AP for communication, see 138 fig.1 and ¶.59); and

   - processing the communication signal by the allocated processor (process the

communication signal by the allocated processor within the selected AP, see 138 fig.1

and ¶.59).

Regarding claim 10, Lee discloses, "wherein the protocol is one of an 802.11a,

802.11b, 802.11g and Bluetooth protocol (¶.11)."

Regarding claim 11, it is a computer-readable claim corresponding to the

method claim 1, except the limitation of "computer-readable medium (inherent to have a

medium to operate the flowchart in fig.1 and other algorithms, see ¶.7)" and is therefore

rejected for the similar reasons set forth in the rejection of claim 1.

Regarding claim 20, it is a claim corresponding to claim 10 and is therefore

rejected for the similar reasons set forth in the rejection of the claim.

Regarding claim 21, it is a system claim corresponding to the method claim 1

and is therefore rejected for the similar reasons set forth in the rejection of the claim 1.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
section 102 of this title, if the differences between the subject matter sought to be patented and the prior art
are such that the subject matter as a whole would have been obvious at the time the invention was made to
a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be
negatived by the manner in which the invention was made.

5.   Claims 2-9, 12-19, and 22-31 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Lee and Schmidt (US 7058040, "Schmidt").

Regarding claim 2, Lee is silent on "selecting the allocated processor from a pool

of available processors for the processing of the communication signal." However,

Schmidt discloses a pool of available processors such as MIPS processor and/or one or

more digital signal processors (DSPs) which are configured to operate optimally on specific problems (see col.5, ln.51-59). Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to apply the method of allocating/assigning a specific processor among the processors. The motivation is to operate optimally on specific problem. For example, the bank of DSPs can be optimized to handle discrete cosine transforms (Schmidt, see col.5, lines 59-66), whereas one of the processors can be used to handle other specific operation such as operating for one of the selected IEEE 802.11 protocols.

Regarding claim 3, Lee is silent on "the allocating further comprises updating the processor to be capable of the processing of the communication signal." However, Schmidt discloses the method of selecting one of the processors based on the specific task (see col.5, ln.51-59). Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to apply the method of allocating/assigning a specific processor among the processors based on newly selected protocol, that is, selecting a new processor for a newly selected protocol. The motivation is to operate optimally on specific problem. For example, the bank of DSPs can be optimized to handle discrete cosine transforms (Schmidt, see col.5, lines 59-66), whereas one of the processors can be used to handle other specific operation task such as operating for a newly selected protocol among IEEE 802.11 protocols.

Regarding claim 4, Lee is silent on "updating further comprises downloading protocol code compatible with the determined protocol to the processor." However, in a system of Schmidt, it is inherent to down load protocol code compatible with the

determined protocol to access one of 802.11 protocols, otherwise, it is not operable. Therefore, this claim is rejected with the similar reasons and motivation set forth in the rejection of claim.

Regarding claim 5, Lee is silent on "storing the compatible protocol code in a memory." However, in a system of Schmidt it is inherent to save the protocol code in a memory, otherwise, it is not operable. Therefore, this claim is rejected with the similar reasons and motivation set forth in the rejection of claim.

Regarding claim 6, Lee is silent on "the downloading further comprises retrieving the compatible protocol code from a portion of the memory." However, there are a plurality of memory/buffers in a system of Schmidt. Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to retrieve/read protocol code from a portion of the memory in order to get code for operating for a specific task.

Regarding claim 7, Lee is silent on "associating the determined protocol code with the portion of the memory." Therefore, this claim is rejected with the similar reasons and motivation set forth in the rejection of claim 6.

Regarding claim 8, Lee is silent on the following cited limitations, however, Schmidt discloses the cited limitation "tuning at least one transceiver device to at least one of a receive and a transmit frequency associated with the communication signal (col.4, ln.4-16)." Therefore, it would have been obvious to one of ordinary skill in the art

at the time of applicant's invention to apply a transceiver taught by Schmidt into the

system of Lee in order to tune a transmit frequency for better/optimum performance.

Regarding claim 9, Lee is silent on the cited limitation, however, Schmidt

discloses, "wherein the processor is a digital signal processor (DSP) (153 fig.2A and

col.5, ln.51-56)." Therefore, it would have been obvious to one of ordinary skill in the art

at the time of applicant's invention to apply a DSP taught by Schmidt into the system of

Lee in order to have embedded functions in the DSP since DSP is a special-purpose

CPU used for digital signal processing applications to provide ultra-fast instruction

sequences.

Regarding claims 12-19, they are claims corresponding to claims 2-9,

respectively and are therefore rejected for the similar reasons set forth in the rejection of

the claims.

Regarding claims 22-30, they are claims corresponding to claims 2-10,

respectively and are therefore rejected for the similar reasons set forth in the rejection of

the claims.

Regarding claim 31, Lee discloses, "wherein the at least one integrated

transceiver utilizes a single protocol stack for processing the communication signal for

the 802.11a, 802.11b, and 802.11g protocols (see ¶.11), but lacks what Schmidt

discloses, "Bluetooth protocol (col.1, ln.31)." Therefore, it would have been obvious to

one of ordinary skill in the art at the time of applicant's invention to include Bluetooth

protocol taught by Schmidt into the stack of Lee in order to provide more options clients

looking Bluetooth technology which is available at the time of invention.

Response to Arguments

6.   Applicant's arguments with respect to claims 2-7, 12-17, and 22-27 have been

considered but are moot in view of the new ground(s) of rejection.

7.   Applicant's arguments with respect to claims 1, 11, and 21 have been fully considered

but they are not persuasive.

At pages 11-12, with respect to claim 1, applicant argues that Lee fails to

disclose "allocating a processor within the access point, the processor compatible with

the determined protocol."

In reply, Lee discloses the method of selecting AP based on the determined

protocol as shown in Figure 1 and described paragraph [0059]. An access point (AP) is a

land station or a mobile station carrying on a service for mobile stations and/or

communicating with other APs. Without allocating a processor within the access point,

the selected AP is not operable with mobile stations because a processor within AP

communicates with a processor within mobile or hand-held phone. For example, in a

wireless telephone system, the signals from one or more mobile telephones in an area

are received at a nearby base station, which then connects the call to the land-line

network. A processor in computer network is commonly use to refer to any hardware that

is used for information processing, but not limited to hardware. Therefore, the selected

AP/base station based on the determined protocol inherently includes a processor for

communication based on one of the selected IEEE 802.11 protocols. Therefore, the

examiner respectively disagrees.

Contact Information

8.   Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Jung Park whose telephone number is 571-272-8565. The

examiner can normally be reached on Mon-Fri during 7:00-3:30.

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Jay Patel can be reached on 571-272-2988. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

        Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published

applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For

more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free).

        /Jung Park/

        Examiner, Art Unit 2465

/Jayanti K. Patel/

Supervisory Patent Examiner, Art Unit 2465